

# **LEAD AND COPPER RULE**

## **COMPLIANCE AND ENFORCEMENT**

# Lead and Copper Sampling

## Lead and Copper Sample Results

At or below action levels  
(Pb=15 ppb, Cu= 1.30 ppm)

Above action levels  
Corrosion Control Required

Above action levels  
Transitory or non-representative

# Lead and Copper Sampling

- Sample at a registered sample site.
- Follow sampling procedures.
- If home owners are sampling, first EMPHASIZE sampling procedures.

# Transitory or non-representative results

- “It’s just one sample.”

It is never just one sample.

In small water systems with only five samples it is the highest two averaged.

- “Can’t we just retest that one?”

To change the 90<sup>th</sup> percentile calculation, you need to increase the sample pool to ten or by multiples of ten.

# When do you sample?

- Q1: JAN 01- MAR 31
- Q2: APR 01- JUN 30
- Q3: JUL 01- SEP 30
- Q4: OCT 01- DEC 31

2009											
<b>January</b>					<b>February</b>					<b>March</b>	
S	M	T	W	T	F	S	S	M	T	W	T
1	2	3	4	5	6	7	1	2	3	4	5
8	9	10	11	12	13	14	8	9	10	11	12
15	16	17	18	19	20	21	15	16	17	18	19
22	23	24	25	26	27	28	22	23	24	25	26
29	30	31					29	30	31		
<b>April</b>					<b>May</b>					<b>June</b>	
S	M	T	W	T	F	S	S	M	T	W	T
1	2	3	4	5	6	7	1	2	3	4	5
8	9	10	11	12	13	14	8	9	10	11	12
15	16	17	18	19	20	21	15	16	17	18	19
22	23	24	25	26	27	28	22	23	24	25	26
29	30						29	30			
<b>July</b>					<b>August</b>					<b>September</b>	
S	M	T	W	T	F	S	S	M	T	W	T
1	2	3	4	5	6	7	1	2	3	4	5
8	9	10	11	12	13	14	8	9	10	11	12
15	16	17	18	19	20	21	15	16	17	18	19
22	23	24	25	26	27	28	22	23	24	25	26
29	30	31					29	30			
<b>October</b>					<b>November</b>					<b>December</b>	
S	M	T	W	T	F	S	S	M	T	W	T
1	2	3	4	5	6	7	1	2	3	4	5
8	9	10	11	12	13	14	8	9	10	11	12
15	16	17	18	19	20	21	15	16	17	18	19
22	23	24	25	26	27	28	22	23	24	25	26
29	30						29	30			

# Case Study: Early Sampling

- Quarter 3 Compliance

Sampled on:

- July 15

- August 5

- August 19

**2 0 0 9**

## January

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

## February

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

## March

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

## April

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

## May

Su	Mo	Tu	We	Th	Fr	Sa
31				1	2	
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

## June

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

## July

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

## August

Su	Mo	Tu	We	Th	Fr	Sa
30	31				1	
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

## September

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5		
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

## October

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

## November

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

## December

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5		
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Designed by Anny [www.annystudio.com](http://www.annystudio.com)

# Sample date: July 15

**Drinking Water and Groundwater Bureau  
Analysis Request Form  
LEAD & COPPER  
Compliance Sample Site(s) per Master Sampling Schedule**

September 10, 2009  
Page 1 of 2

EPA ID:	Collected By: _____ <small>(Print Name)</small>						
System Name:	Signature: _____						
PWS Town:	Phone Number:						
Round: 10	Samples Required: 10	Compliance Period: 04/01/26					
Sample Type: Routine <input type="checkbox"/> Confirmation <input type="checkbox"/> Make-up <input type="checkbox"/> Sample in Quarter: Q3-Jul-Sep							
Lead/Copper samples must be taken in your assigned sampling quarters, listed on your Master Sampling Schedule. If any of the sites below cannot be used, please replace them with alternates from your registered list.							
Site ID	Sample Site Location	Date/TIME Sample Taken	Sample Taken	Containers	Lead mg/L	Copper mg/L	Lab ID# (For lab use only)
001	66 MAIN ST	7-15-09			0.004	0.255	
005	43 DUBLIN ST	7-15-09			0.017	0.102	
007	104 MAIN ST	7-15-09			0.011	0.077	
011	15 ELM ST	7-15-09			0.005	0.112	
019	8 MAIN ST	7-15-09			0.006	0.281	
021	56 MAIN ST	7-15-09			0.005	0.256	
023	515 MAIN ST	7-15-09			0.013	0.141	

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September 10, 2009  
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EPA ID:	System Name:						
PWS Town:	Round: 10 Samples Required: 10 Compliance Period: 01/01/26						
Sample Type: Routine <input type="checkbox"/> Confirmation <input type="checkbox"/> Make-up <input type="checkbox"/> Sample in Quarter: Q3-Jul-Sep							
Lead/Copper samples must be taken in your assigned sampling quarter as listed on your Master Sampling Schedule. If any of the sites below cannot be used, please replace them with alternates from your registered list.							
Site ID	Sample Site Location	Date Sample Taken	Sample Taken	Containers	Lead mg/L	Copper mg/L	Lab ID# (For lab use only)
027	51 BANGOR ST	7-15-09			0.018	0.307	
029	71 LANGASTER RD	7-15-09			0.005	0.097	
031	2 GORDON AVE	7-15-09			0.003	0.037	
033	16 ELM ST						
Laboratory Name Responsible for Analysis: _____				Laboratory Cert. ID: _____			
Laboratory Phone #: _____				Received for Laboratory by: _____			

# 90<sup>th</sup> percentile calculation:

- Lead results, sample group of ten:
- 18 ppb, 17 ppb, 13 ppb, 11 ppb, 6 ppb, 5 ppb, 5 ppb, 5 ppb, 4 ppb, 3 ppb
- = 17 ppb

# Sample date: August 5

**Drinking Water and Groundwater Bureau  
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Compliance Sample Site(s) per Master Sampling Schedule

September 10, 2009  
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EPA ID:	Collected By:				
System Name:	Signature: <small>Please print name. Please do not write above or below the line.</small>				
PWS Town:	Phone Number:				
Round: 10 Samples Required: 10	Compliance Period: 01/01/20				
Sample Type: Routine <input checked="" type="checkbox"/> Confirmation <input type="checkbox"/> Make-up <input type="checkbox"/>	Sample In Quarter: Q3-Jul-Sep				
Lead/Copper samples must be taken in your assigned sampling quarter as listed on your Master Sampling Schedule. If any of the sites below cannot be used, please replace them with alternatives from your registered list.					
Site ID	Sample Site Location	Date & Time	# off. (1000's)	Copper mg/L	Lab ID# (For lab use only)
601	66 MAIN ST	8-5-09		0.004 0.194	
605	43 DUBLIN ST	8-5-09		0.011 0.077	
607	104 MAIN ST	8-5-09		0.006 0.144	
611	16 ELM ST	8-5-09		0.038 0.253	
619	8 MAIN ST	8-5-09		0.004 0.112	
621	66 MAIN ST	8-5-09		0.013 0.181	
623	515 MAIN ST	8-5-09		0.002 0.230	

**Drinking Water and Groundwater Bureau  
Analysis Request Form  
LEAD & COPPER**

Compliance Sample Site(s) per Master Sampling Schedule

September 10, 2009  
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EPA ID:	Collected By:				
System Name:	Signature: <small>Please print name. Please do not write above or below the line.</small>				
PWS Town:	Phone Number:				
Round: 10 Samples Required: 10	Compliance Period: 01/01/20				
Sample Type: Routine <input checked="" type="checkbox"/> Confirmation <input type="checkbox"/> Make-up <input type="checkbox"/>	Sample In Quarter: Q3-Jul-Sep				
Lead/Copper samples must be taken in your assigned sampling quarter as listed on your Master Sampling Schedule. If any of the sites below cannot be used, please replace them with alternatives from your registered list.					
Site ID	Sample Site Location	Date & Time	# off. (1000's)	Copper mg/L	Lab ID# (For lab use only)
927	51 BANGOR ST	8-5-09		0.003 0.250	
928	71 LANCASTER RD	8-5-09		0.004 0.193	
931	2 GORDON AVE	8-5-09		0.003 0.138	
933	16 ELM ST				
Laboratory Name Responsible for Analysis:			Laboratory Cert. ID#:		
Laboratory Phone #:			Received for Laboratory by:		

# 90<sup>th</sup> percentile calculation:

- ❖ Lead results, sample group of twenty:
- ❖ 38 ppb, 18 ppb, 17 ppb, 13 ppb, 13 ppb, 11 ppb, 11 ppb, 6 ppb, 6 ppb, 5 ppb, 5 ppb, 5 ppb, 4 ppb, 4 ppb, 4 ppb, 4 ppb, 3 ppb, 3 ppb, 3 ppb, 2 ppb.
- ❖ = 17 ppb

# Sample date: August 19

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LEAD & COPPER**

Compliance Sample Site(s) per Master Sampling Schedule

September 10, 2009  
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EPA ID:	Collected By: _____ <small>(Print Name)</small>				
System Name:	Signature: _____ <small>I certify that the above laboratory has been selected for my system's sample collection and is provided for lab use or shall take note.</small>				
PWS Town:	Phone Number: _____				
Round: 10 Samples Required: 10	Compliance Period: 04/01/09				
Sample Type: Routine <input type="checkbox"/> Confirmation <input type="checkbox"/> Make-up <input type="checkbox"/>	Sample in Quarter: Q3-Jul-Sep				
Note: Copper samples must be taken in your assigned sampling quarter as listed on your Master Sampling Schedule. If any of the sites below cannot be used, please replace them with alternatives from your registered list.					
Site ID	Sample Site Location	Date/Taken	Lead mg/L	Copper mg/L	Lab ID# (For lab use only)
001	66 MAIN ST	8-19-09	0.001	0.079	
005	43 DUELIN ST	8-19-09	0	0	
007	104 MAIN ST	8-19-09	0.002	0.041	
011	15 ELM ST	8-19-09	0	0	
019	8 MAIN ST	8-19-09	0.001	0.042	
021	66 MAIN ST	8-19-09	0.004	0.040	
023	515 MAIN ST	8-19-09	0	0.077	

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Compliance Sample Site(s) per Master Sampling Schedule

September 10, 2009  
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EPA ID:	Collected By: _____ <small>(Print Name)</small>				
System Name:	Signature: _____ <small>I certify that the above laboratory has been selected for my system's sample collection and is provided for lab use or shall take note.</small>				
PWS Town:	Phone Number: _____				
Round: 10 Samples Required: 10	Compliance Period: 04/01/09				
Sample Type: Routine <input type="checkbox"/> Confirmation <input type="checkbox"/> Make-up <input type="checkbox"/>	Sample in Quarter: Q3-Jul-Sep				
Note: Copper samples must be taken in your assigned sampling quarter as listed on your Master Sampling Schedule. If any of the sites below cannot be used, please replace them with alternatives from your registered list.					
Site ID	Sample Site Location	Date/Taken	Lead mg/L	Copper mg/L	Lab ID# (For lab use only)
027	51 BANCOR ST	8-19-09	0	0.057	
029	71 LANCASTER RD	8-19-09	0.001	0.019	
031	2 GORDON AVE	8-19-09	0.002	0.055	
033	15 ELM ST				
Laboratory Name Responsible for Analysis: _____			Laboratory Cont. ID: _____		
Laboratory Phone #: _____			Received for Laboratory by: _____		

# 90<sup>th</sup> percentile calculation:

- Lead results, sample group of thirty:
- 38 ppb, 18 ppb, 17 ppb, 13 ppb, 13 ppb, 11 ppb, 11 ppb, 6 ppb, 6 ppb, 5 ppb, 5 ppb, 5 ppb, 4 ppb, 4 ppb, 4 ppb, 4 ppb, 4 ppb, 3 ppb, 3 ppb, 3 ppb, 2 ppb, 2 ppb, 2 ppb, 1 ppb, 1 ppb, 1 ppb, ND, ND, ND, ND.
- = 13 ppb

# Partial Listing Corrosion Control Paperwork:



- Notice of exceedance letter
- OCCTR Packet
- Public Education Notification Packet
- Exceedance Requirements for Community or Non-transient, non-community Systems
- Initial Water Quality Parameters
- Lead and Copper Analysis Request Forms for two full rounds.

# **WHEN YOU SAMPLE:**

## **1. SITE**

REGISTERED SITE FOR ALL RESULTS

## **2. PROCEDURE**

SAVES TIME BY NOT WASTING IT

## **3. TIMING**

GIVE YOURSELF SPACE TO RESAMPLE IN

# Contact Information:

For help with routine or follow-up lead and copper sampling, sampling sites and schedules and compliance paperwork please call:

Joan Fitzsimmons (603) 271-2516

For technical assistance with corrosion control contact:

Richard Thayer (603) 271-2950

**THANK YOU.**

# RESOURCES:

- ❖ [http://www2.des.state.nh.us/OneStop/Public Water Systems Query.aspx](http://www2.des.state.nh.us/OneStop/Public%20Water%20Systems%20Query.aspx)
- ❖ EPA ID # to Master Sampling Schedule includes analysis request forms for lead and copper and water quality
- ❖ <http://des.nh.gov/organization/divisions/water/dwgb/lead.htm>
- ❖ Public Lead Education, Sampling Instructions, Public Notices
- ❖ <http://des.nh.gov/organization/divisions/water/dwgb/categories/faq.htm>
- ❖ Answers to frequently asked questions

